

## UNITED STATE: ARTMENT OF COMMERCE Patent and Trade....ark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NUMBER FILING DATE FIRST NAMED APPL	CANT ATTY, DOCKET NO.
UB/R/Z,876 U6/U7/95 GARCIA	A TRD-001-IA
	EXAMINER
26M2/012)	
KILLWORTH GOTTMAN HAGAN & SCHAEFE ONE DAYTON CENTRE SUITE 500	OH_ M  ART UNIT PAPER NUMBER
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DAYTON OH 45402-2023	2605
	DATE MAILED:
	01/21/97
This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS	
OFFICE ACTION SUM	MARY
Responsive to communication(s) filed on	
This action is FINAL.	
Since this application is in condition for allowance except for formal matters	prosecution as to the merits is closed in
accordance with the practice under Ex parte Quayle, 1935 D.C. 11; 453 O.G.	
ortened statutory period for response to this action is set to expire	three month(s), or thirty days,
tortened statutory period for response to this action is set to expire thever is longer, from the mailing date of this communication. Failure to resp	ond within the period for response will cause
application to become abandoned. (35 U.S.C. § 133). Extensions of time m	
6(a).	
osition of Claims	
Claim(s)	
Of the above, claim(s)	is/are withdrawn from consideration.
Claim(s) \ \Z_	
	is/are allowed.
Claim(s) 31-34, 35-39, 29 14, 15,	\7\\3\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Claim(s) 31-3+, 35-39, 29, 14, 15, Claim(s) 24, 21, 51, 9, 7, 7, 7, 28	is/are rejected.
Claim(s) 31-3+, 35-39, 29, 14, 15, Claim(s) 24, 21, 51, 9, 7, 7, 7, 28	\7\\3\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
Claim(s) 3\-3+,35-39,29,14,15, Claim(s) 24,215,9,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,7,	is/are rejected.
Claim(s) 3 \ - 3 + 3 5 - 3 9 1 2 9 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	is/are rejectedis/are objected toare subject to restriction or election requirement.
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Claim(s)  Claim(s)  Claim(s)  Claim(s)  Claim(s)  Claim(s)  See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948 The drawing(s) filed on	is/are rejectedis/are objected toare subject to restriction or election requirement.  3. are objected to by the Examinerisapproved disapproved.
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-SEE OFFICE ACTION ON THE FOLLOWING PAGES-

TOL-326 (Rev. 9/96)

☐ Notice of Draftperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

± U.S. GPO: 1998-404-498/40517

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Art Unit: 2605

1. The amendment filed July 8, 1996 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: When an audio signal is the form of a square wave.

Applicant is required to cancel the new matter in the response to this Office action.

- 2. Claims 32 to 34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. An input audio signal in the form of a square wave is a new matter.
- 3. Claims 17 to 18, 29 and 39 rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.
- 4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Gauthier.

Gauthier discloses an apparatus for enhancing the quality of an input audio signal and which is comprised of a the input audio signal having a plurality of frequencies (12); a circuit operatively adapted for distorting the input audio signal therethrough into an enhanced audio signal by non-linearly amplifying frequencies of the input audio signal (14) such that the enhanced audio signal exhibits an improved harmonic quality; the audio signal has a bandwidth of frequencies with a low end and a high end (col. 5, lines 24 to 28 and col. 6, lines 11 to 14)...

Claims 31 to 34, 35 to 38, 14 to 15 and 17 to 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier.

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gauthier.

  does not disclose recording the enhanced audio signal onto a recording medium.

However, even though Gauthier does not disclose recording onto a recording medium, it would have been obvious to have a recording medium as claimed because recording an audio signal for later use is well known in the art.

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- 8. Claims 24, 2, 5, 2 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. Claim 12 is allowable over prior art of record.
- 10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minsun Oh whose telephone number is (703) 308-6741.

Minsun Oh

Patent Examiner

Group 2605

January 21, 1997